AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in the above-referenced application.

Listing of Claims:

1. (Currently Amended) A computer implemented method for producing a visual form of data comprising:

receiving data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of a plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template; and

storing the identified at least some of the content data.

2. (original) The method of claim 1 further comprising normalizing the data representing the visual form of data.

3. (original) The method of claim 2 wherein the data is normalized in accordance with a displayed form of the visual form of data.

4. (original) The method of claim 2 wherein the visual form of data is characterized by a plurality of dimensions characterized by at least two coordinate systems, wherein normalizing the data representing the visual form of data includes converting values expressed in the two coordinate system into a common coordinate system.

5. (original) The method of claim 4 wherein the common coordinate system is the coordinate system of a displayed form of the visual form of data.

6. (Previously Presented) The method of claim 4 wherein the extraction instruction includes information indicating location of at least some of the content data based on the common coordinate system.

7. (original) The method of claim 1 wherein the data representing the visual form of data comprises data in a format required by an operating system layer for outputting the visual form of data by a printer.

8. (original) The method of claim 7 wherein the operating system layer is Windows operating system and the data representing the visual form of data is a Windows metafile.

9.-11. (Canceled)

12. (Previously Presented) The method of claim 1 further comprising:

displaying a sample visual form of data,

receiving data from a user indicating location of data selected by the user in the displayed sample visual form of data, and

forming the extraction instruction based on location data identifying the location of the data selected by the user.

13. (original) The method of claim 12 further comprising:

storing the extraction instruction.

14. (original) The method of claim 13 further comprising:

storing the extraction instruction in association with data representing the sample visual form of data.

15. (original) The method of claim 1 wherein the received data further represents a plurality of visual forms of data.

16. (Currently Amended) The method of claim 15 wherein storing the identified at least some of the content data further includes storing the identified at least some of the content data in association with data representing a corresponding one of a plurality of visual forms of data.

17. (Previously Presented) Computer readable media containing a computer program to produce a visual form of data, comprising instructions for:

receiving data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template; and

storing the identified content data as at least one tag value.

18. (Currently Amended) Computer system for producing a visual form of data comprising:

[[a]] an input port that receives data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format, said input port receiving data indicating a location of selected data;

a processor that forms an extraction instruction based on location data identifying the location of selected data, analyzes said visual form of data using a template and identifies at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, wherein said visual form of data [[being]] is characterized by a plurality of dimensions represented using a coordinate system, wherein said template [[including]] includes said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction, said processor extracting a tag value for at least one tag identified in said template; and

a storage media for storing [[stores]] the identified [[the]] at least some of the content data as at least one tag value.

19. (Currently Amended) A [[method]] computer implemented method for processing a visual form of data comprising:

transmitting a computer program comprising instructions for:

receiving data representing a visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template; and

storing the identified at least some of the content data in a database.

20-24. (canceled)

25. (Currently Amended) A computer implemented method for producing a visual form of data comprising:

receiving data representing a visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template ~~to search or retrieve the visual form of data~~; and

initiating performance of an action based on results of said identifying of at least some of the content data.

26. (Previously Presented) Computer readable media containing a computer program includes instructions for producing a visual form of data, comprising:

receiving data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of said string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template; and

initiating performance of an action based on results of said identifying at least some of the content data.

27. (Currently Amended) Computer system for producing a visual form of data comprising:

an input port that receives data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, wherein said visual form of data [[corresponding]] corresponds to one of a print format or a display format, said input port receiving data indicating a location of selected data; and

a processor that forms an extraction instruction based on location data identifying the location of selected data, analyzes said visual form of data using a template, and identifies at least some of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said processor initiates performance of an action based on results of said identification of at least some of the content data, where said visual form of data [[being]] is characterized by a plurality of dimensions represented using a coordinate system, where said template includes [[including]] said extraction instruction used in identifying a location of a string included in said content data, said location being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, wherein said extraction instruction [[including]] includes information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at

least some of the content data in the direction, and said processor extracts a tag value for at least one tag identified in said template.

28-49. (canceled)

50. (Currently Amended) A [[method]] computer implemented method for processing a visual form of data comprising:

receiving data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

analyzing said visual form of data using a template and identifying at least some of the content data in accordance with said template having an extraction instruction after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

extracting a tag value for at least one tag identified in said template; and

storing the identified at least some of the content data as at least one tag value.

51. (Canceled)

52. (previously presented) The method of Claim 50 further comprising:

creating said template.

53. (previously presented) The method of Claim 52, further comprising:

editing said template.

54. (previously presented) The method of Claim 53, wherein said editing said template further comprises:

editing said extraction instruction included in said template.

55. (previously presented) The method of Claim 52, further comprising:

displaying a sample visual form of data;

receiving user location data indicating a location of data selected by a user in the displayed sample visual form of data; and

forming the extraction instruction based on location data identifying the location of the data selected by the user.

56. (previously presented) The method of Claim 55, further comprising:

storing the extraction instruction.

57. (previously presented) The method of Claim 56, further comprising:

storing the extraction instruction in association with data representing the sample visual form of data used during creating said template.

58. (Currently Amended) The method of Claim 57, wherein storing the identified at least some of the content data further includes storing the identified at least some of the content data in association with the data representing a corresponding one of a plurality of visual forms of data.

59. (previously presented) The method of Claim 50, further comprising:

normalizing the data representing the visual form of data.

60. (previously presented) The method of Claim 59, further comprising:

translating coordinate references to coordinate references of a display system.

61. (previously presented) The method of Claim 59, further comprising:

scaling text strings in accordance with a display device.

62. (previously presented) The method of Claim 59, further comprising:

joining and splitting text.

63. (previously presented) The method of Claim 50, wherein the extraction instruction locates data in a report area and inserts the data located into a selected tag in association with a report corresponding to the visual form of data.

64. (Previously Presented) The method of Claim 50, wherein the extraction instruction locates data in a direction relative to a selected reference point in a report and inserts the data located into a selected data in association with the report corresponding to the visual form of data.

65. (Previously Presented) The method of Claim 50, wherein the template further comprises another extraction instruction which determines whether at least one selected word is within a report corresponding to the visual form of data and accordingly sets a boolean tag in association with said report.

66. (previously presented) The method of Claim 50, wherein the extraction instruction inserts data into a selected tag in association with a report corresponding to the visual form of data based on data included in the report.

67. (Currently Amended) A [[method]] computer implemented method for processing a visual form of data comprising:

receiving data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

receiving data indicating a location of selected data;

forming an extraction instruction based on location data identifying the location of selected data;

applying a template to the visual form of data;

analyzing said visual form of data using said template and identifying a portion of the content data in accordance with said template after applying said format data to said content data to produce said visual form of data, said template including extraction instructions indicating how to extract content data from the visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction; and

extracting, in accordance with at least one extraction instruction in said template, a tag value for at least one tag identified in said template.

68. (previously presented) The method of Claim 67, further comprising:

applying the template to previously stored data.

69. (previously presented) The method of Claim 67, further comprising:

applying the template to data in connection with a print operation.

70. (previously presented) The method of Claim 67, further comprising:

storing said tag value in association with a report corresponding to said visual form of data.

71. (previously presented) The method of Claim 67, wherein the visual form of data is characterized by at least one of a plurality of dimensions and the extraction instruction includes information with respect to location of a reference marker and a direction in at least one of said plurality of dimensions.

and wherein identifying said portion of the content data includes searching in the direction for identifying said portion of the content data in the direction.

72. (previously presented) The method of Claim 67 further comprising:

creating said template.

73. (previously presented) The method of Claim 72, further comprising:

editing said template.

74. (Previously Presented) The method of Claim 73, wherein said editing said template further comprises:

editing an extraction instruction included in said template.

75. (Previously Presented) The method of Claim 73, further comprising:

displaying a sample visual form of data;

receiving user location data indicating a location of data selected by a user in the displayed sample visual form of data; and

forming an extraction instruction based on location data identifying the location of the data selected by the user.

76. (previously presented) The method of Claim 75, further comprising:

storing the extraction instruction.

77. (previously presented) The method of Claim 76, further comprising:

storing the extraction instruction in association with data representing the sample visual form of data used during creating said template.

78. (Currently Amended) The method of Claim 77, wherein storing the identified at least some of the content data further includes storing the identified at least some of the content data in association with data representing a corresponding one of a plurality of visual forms of data.

79. (previously presented) The method of Claim 67, further comprising:

normalizing the data representing the visual form of data.

80. (previously presented) The method of Claim 79, further comprising:

translating coordinate references to coordinate references of a display system.

81. (previously presented) The method of Claim 79, further comprising:

scaling text strings in accordance with a display device.

82. (previously presented) The method of Claim 79, further comprising:

joining and splitting text.

83. (Previously Presented) The method of Claim 67, wherein one of the extraction instruction locates data in a report area and inserts the data located into a selected tag in association with a report corresponding to the visual form of data.

84. (Previously Presented) The method of Claim 67, wherein one of the extraction instruction locates data in a direction relative to a selected reference point in the report and inserts the data located into a selected data in association with a report corresponding to the visual form of data.

85. (Previously Presented) The method of Claim 67, wherein one of the extraction instruction determines whether at least one selected word is within a report corresponding to the visual form of data and accordingly sets a boolean tag in association with said report.

86. (Previously Presented) The method of Claim 67, wherein one of the extraction instruction inserts data into a selected tag in association with a report corresponding to the visual form of data based on data included in the report.

87. (Currently Amended) A system for processing a visual form of data comprising:

a data receiver that receives data representing the visual form of data, the received data comprising content data and format data indicating a manner in which the content data is to be visually displayed, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format, said data receiver receiving data indicating a location of selected data, an extraction instruction formed based on location data identifying the location of selected data;

a template runner that applies a template to said visual form of the data and analyzes said visual form of data using said template and identifies a portion of the content data used in generating at least one tag value after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction, a tag value being extracted for at least one tag identified in said template; and

a database in which said template is stored.

88. (previously presented) The system of Claim 87, further comprising:

a template builder that creates said template and stores said template to said database.

89-90. (Canceled).

91. (Previously Presented) The system of Claim 88, wherein said template builder is used to edit and review the extraction instructions included in said template.

92. (Currently Amended) A computer program product stored in a storage medium and used to [[processing]] process a visual form of data comprising:

[[a]] machine executable code that receives data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

[[a]] machine executable code that receives data indicating a location of selected data;

[[a]] machine executable code that forms an extraction instruction based on location data identifying the location of selected data;

machine executable code that analyzes said visual form of data using a template and identifies at least some of the content data in accordance with said template having an extraction instruction after applying said format data to said content data to produce said visual form of

data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

[[a]] machine executable code that extracts a tag value for at least one tag identified in said template; and

[[a]] machine executable code that stores the identified content data as at least one tag value.

93. (Currently Amended) A computer program product stored in a storage medium and used to produce a [[virtual]] visual form of data in a computer system comprising:

[[a]] machine executable code that receives data representing the visual form of data, the data received comprising content data and format data indicating a manner in which the content data is to be visually represented, wherein said format data is applied to said content data to produce said visual form of data, said visual form of data corresponding to one of a print format or a display format;

[[a]] machine executable code that receives data indicating a location of selected data;

machine executable code that forms an extraction instruction based on location data identifying the location of selected data;

[[a]] machine executable code that applies a template to the visual form of data;

machine executable code that analyzes said visual form of data using said template and identifies a portion of the content data in accordance with said template, said template including extraction instructions indicating how to extract content data from the visual form of data after applying said format data to said content data to produce said visual form of data, said visual form of data being characterized by a plurality of dimensions represented using a coordinate system, said template including said extraction instruction used in identifying a location of a string included in said content data, said location of the string being represented using the coordinate system and corresponding to the location of the string as represented in the visual form of data, said extraction instruction including information with respect to a reference marker and a direction in one of the plurality of dimensions where identifying at least some of the content data includes searching in the direction for identifying at least some of the content data in the direction;

[[a]] machine executable code that extracts a tag value for at least one tag identified in said template; and

[[a]] machine executable code that stores the identified at least some of the content data as said at least one tag value.

94.-100. (Canceled)